

IN THE CLAIMS:

On page 14, line 1 please cancel "Patent claims" and substitute:

--WE CLAIM AS OUR INVENTION:-- therefor.

Cancel claims 1-11 on substitute pages 14 and 15.

5 1-11. (Cancelled)

Add the following new claims:

12. (New) A method for operating a computed tomography apparatus having an x-ray radiator, which emits an x-ray beam from a focus, a radiation detector at which said x-ray beam is incident on an active detection
10 field of said radiation detector and a diaphragm disposed proximate said radiation detector in said x-ray beam, said diaphragm having oppositely disposed absorber elements linearly movable in said diaphragm toward and away from each other, each of said absorber elements being curved in said x-ray beam relative to said focus, and a movable support adapted to receive an
15 examination subject thereon, said method comprising the steps of:

acquiring computed tomography data from the examination subject in a spiral scan of said subject by rotating said x-ray source and said radiation detector around said subject and around a system axis while irradiating said examination subject with said x-ray beam,
20 and while moving said support with the examination subject thereon through said x-ray beam in a direction substantially parallel to said system axis; and

during at least one of a beginning of said spiral scan or an end of said spiral scan, reducing exposure of said examination subject to
25 said x-ray beam by dynamically varying a spacing between said absorber elements by asymmetrically displacing said absorber elements independently of each other in said diaphragm with respect to a line connecting said focus and a center of said active detection field.

13. A method as claimed in claim 12 comprising, before said beginning of said spiral scan, placing one of said absorber elements in a completely closed position in said diaphragm relative to said line, and placing the other of said absorber elements in a completely open position in said diaphragm relative to said line.

14. A method as claimed in claim 13 comprising after said beginning of said scan, opening said absorber element in said closed position in synchronization with said movement of said patient support during said spiral scan.

15. A method as claimed in claim 13 comprising, before an end of said spiral scan, closing said absorber element in said open position in synchronization with said movement of said support.

16. A method as claimed in claim 12 comprising displacing a first of said absorber elements in said diaphragm with a first drive connected to said first of said absorber elements, and displacing a second of said absorber elements in said diaphragm with a second drive, operated independently of said first drive, connected to said second of said absorber elements.

17. A method as claimed in claim 16 comprising mounting the respective absorber elements in said diaphragm for linear movement thereof by said first and second drives.

18. A method as claimed in claim 17 comprising moving said first of said absorber elements in said diaphragm along a first linear guide in said diaphragm and moving said second of said absorber elements along a second linear guide in said diaphragm.

19. A method as claimed in claim 17 comprising employing a first linear motor as said first drive and employing a second linear motor as said second drive.

20. A method as claimed in claim 12 comprising curving each of said absorber elements in a plane perpendicular to said system axis.

21. A method as claimed in claim 12 comprising curving each of said absorber elements along an arc of a circle having a center coinciding
5 with said focus of said x-ray radiator.

22. A method as claimed in claim 12 comprising offsetting said absorber elements with respect to each other along said line by curving said absorber elements with respectively different curvature radii.

23. A method as claimed in claim 22 comprising differing said
10 curvature radii from each other in amount in a range between 0.5% and 10% of an offset spacing between said absorber elements along said line.